## Contact

0031612857404 (Mobile) pablomperezg@gmail.com

www.linkedin.com/in/ pablomperezgarcia (LinkedIn)

## Top Skills

Project Management
Research and Development (R&D)
Catalysis

## Languages

English (Full Professional)

Spanish (Native or Bilingual)

Dutch (Elementary)

French (Full Professional)

Portuguese (Limited Working)

#### Honors-Awards

Open Competition Domain Science - XS Package

S.I. Patiño Foundation Scholarship

### **Publications**

Truncated Cinchona alkaloids as catalysts in enantioselective monobenzoylation of meso-1,2-diols

Nickel-catalyzed diastereoselective alkyl-alkyl Kumada coupling reactions

DEGRADATION OF SYNTHETIC ORGANIC DYES IN SOLUTION BY FERRATE – HYPOCHLORITE OR CALCIUM HYPOCHLORITE

ELECTROCHEMICAL OXIDATION OF SYNTHETIC ORGANIC DYES BY FERRATE (VI), USING COMMERCIAL STEEL WOOL ELECTRODES

Synthesis, Reactivity, and Bonding Analysis of a Tetracoordinated Nickel Carbene

# Pablo M. Pérez García

Chemist, Ph.D. | Homogeneous catalysis | Organic Synthesis | Analytical Chemistry

Cochabamba, Bolivia

## Summary

Enthusiastic and creative chemist. I have expertise in designing and applying homogeneous catalysts supported by detailed mechanistic studies. Excellent skills in organic synthesis and analytical chemistry. Proven track record of excellent work performance within multicultural and cross-functional teams in Europe and South America.

## Experience

Universidad Privada Boliviana - Fundación Educativa Research Associate and Lecturer April 2024 - Present (8 months)

Cochabamba, Bolivia

## **Utrecht University**

Researcher

August 2021 - March 2023 (1 year 8 months)

Utrecht, Netherlands

- # Drafted and authored a successful research proposal, acquiring a 50,000 € grant from the Dutch Research Council.
- # Designed, synthesized, and scrutinized the reactivity of innovative nickel complexes to assess their viability as catalysts for olefin metathesis, focusing on enhancing the sustainability of biodiesel production.
- # Offered technical mentoring to over 10 Ph.D., master's, and undergraduate students.

### Utrecht University

Researcher

January 2018 - January 2021 (3 years 1 month)

Utrecht Area, Netherlands

# Designed, synthesized, and scrutinized the reactivity of innovative nickel complexes for a complete study of the cross-coupling catalytic cycle's elementary steps (oxidative addition and reductive elimination).

# Assessed catalysts performance through rigorous mechanistic studies, encompassing kinetic analysis, structural reactivity assessments, and the identification of pre-equilibrium and competing reactions.

# Offered technical mentoring to over 10 Ph.D., master's, and undergraduate students.

# Led the development of a collaboration project in computational chemistry with external partners.

Universidad Privada Boliviana - Fundación Educativa Research Associate and Lecturer March 2016 - August 2017 (1 year 6 months)

Cochabamba - Bolivia

# Designed, implemented, and validated an electrochemical oxidation process within a small batch reactor to treat wastewater containing industrial synthetic dyes, substantially reducing more than 90% of the chemical oxygen demand.

# Developed, edited, and delivered instructional content for undergraduate engineering courses (20 classroom hours/week).

# Instructed and evaluated more than 200 students (teaching performance evaluated over 90%).

EPFL (École polytechnique fédérale de Lausanne) Research and Teaching Assistant March 2011 - August 2015 (4 years 6 months)

Lausanne Area, Switzerland

# Optimized homogeneous cross-coupling catalysts via rational structure modification.

# Performed the route scouting for the multi-step synthesis of various organic (both achiral and chiral) and organometallic compounds, ensuring quality control through different instrumental analytical techniques.

# Trained and lead a team of 5 members formed by master students and organic chemistry technicians.

# Coordinated the complete purchasing process and managed the inventory of scientific equipment (e.g., automated liquid chromatography, vacuum pumps, etc.).

The American International School of Bolivia Science Teacher July 2009 - December 2010 (1 year 6 months) Cochabamba - Bolivia # Instructed 9th and 10th grade students in Chemistry and Physics, preparing them for the International Baccalaureate diploma program (10 classroom hours/week, groups up to 20 students).

Universidad Catolica Boliviana San Pablo Regional Cochabamba Lecturer and Project Supervisor 2006 - 2010 (4 years)

Cochabamba - Bolivia

- # Developed, edited, and delivered instructional content for undergraduate engineering courses (10 classroom hours/week).
- # Designed experimental protocols and provided instructional supervision for laboratory practical sessions within the engineering undergraduate curriculum (10 classroom hours/week, groups of up to 20 students).
- # Supervised five environmental engineering projects in wastewater treatment, bioindication, and inventory of atmospheric emissions. Coordinated the technical, budgeting, and legislative aspects of the projects.

Université de Genève Master Thesis October 2005 - March 2006 (6 months) Geneva Area, Switzerland

# Improved the synthesis of a quinine derived organic catalyst and screened its activity for enantioselective acylations.

## Education

Ecole polytechnique fédérale de Lausanne Doctor of Philosophy (PhD), Chemistry and Chemical Engineering · (2011 - 2015)

Universidad Mayor de San Simon Certificate in Competency-based College Education , Pedagogy · (2016 - 2016)

Universitat Politècnica de Catalunya

Postgraduate certificate in Environmental Management, Environmental/
Environmental Health Engineering · (2011 - 2012)

Ecole polytechnique fédérale de Lausanne Additional Semester, Chemical Engineering (2008 - 2008)

## University of Geneva

BSc. and MSc., Chemistry · (2001 - 2006)